

### ***Data Set Number 101: Effect of corralling on millet production***

Identification\_Information:

Citation:

Citation\_Information:

Originator: Keiichi Hayashi

Publication\_Date: 23 October 2006

Title: ; Effect of corralling on millet production

Edition: version 1

Geospatial\_Data\_Presentation\_Form: spreadsheet

Description:

Abstract: In order to obtain quantitative information on corralling, wide area survey with 155 Fulani households (36 Fulani in Banizoumbou, 57 in Tchigo Tegui and 62 in Kodey) was carried out in terms of household capacity for corralling as well as agricultural production. The parameter was on number of family, number of livestock, millet production and quantity for the compensation to landowner. Obtained information was analyzed through cluster analysis to identify the characteristics of Fulani household. Based on the result from analysis, majority group was assigned for detailed survey on corralling practice in terms of area and duration of corralling. According to the result through cluster analysis on Fulani, 6 or 7 groups in each village were identified and its characteristics on corralling as well as agricultural production were obtained. First and third group in Banizoumbou occupied 41.4% and 34.5%, respectively. The Fulani in these groups showed fewer numbers of family and lower productions than other groups. They possessed diversified livestock species but more number in cow and goat. Second and third group in Tchigo Tegui occupied 43.9% and 26.8%, respectively. These groups showed also fewer numbers of family and lower productions than others. Main types of livestock in these groups were cow and goat. Possession of each type was lower than other groups. Second and fourth group in Kodey occupied 38.5% and 29.8%, respectively. Second group showed relatively higher number of family and it possessed only cow. On the other hand, fourth group showed lower numbers of family and diversified type of livestock. However, small ruminant was dominant of the group.

Purpose: Obtain quantitative information on the productivity in Fulani households in order to evaluate actual situation of agricultural production in Fakara

Time\_Period\_of\_Content:

Time\_Period\_Information:

Multiple\_Dates/Times:

Single\_Date/Time:

Calendar\_Date: June 2003

Single\_Date/Time:

Calendar\_Date: October 2005

Spatial\_Domain:

Bounding\_Coordinates:

West\_Bounding\_Coordinate: 2.583333

East\_Bounding\_Coordinate: 2.866667

North\_Bounding\_Coordinate: 13.583333

South\_Bounding\_Coordinate: 13.333333

Keywords:

Theme:

Theme\_Keyword\_Thesaurus: None

Theme\_Keyword: agricultural production

Theme\_Keyword: Fulani households  
 Theme\_Keyword: corralling  
 Place:  
 Place\_Keyword\_Thesaurus: None  
 Place\_Keyword: West Africa  
 Place\_Keyword: Niger  
 Place\_Keyword: Fakara  
 Place\_Keyword: Katanga  
 Place\_Keyword: Gourou Yena  
 Point\_of\_Contact:  
 Contact\_Information:  
 Contact\_Organization\_Primary:  
 Contact\_Organization: JIRCAS  
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Cross\_Reference:  
 Citation\_Information:  
 Originator: Mamadou Sangare, Salvador Fernandez-Rivera, Pierre Hiernaux, Andre Bationo, Vijay Pandey  
 Publication\_Date: 2002  
 Title: Influence of dry season supplementation for cattle on soil fertility and millet (*Pennisetum glaucum* L.) yield in a mixed crop/livestock production system of the Sahel  
 Series\_Information:  
 Series\_Name: Nutrient Cycling in Agroecosystems  
 Issue\_Identification: 62: 209-217  
 Publication\_Information:  
 Publication\_Place: Netherlands  
 Publisher: Kluwer Academic Publishers

Data\_Quality\_Information:  
 Attribute\_Accuracy:  
 Attribute\_Accuracy\_Report: 3 sites in Katanga and 1 site in Gourou Yena  
 Quantitative\_Attribute\_Accuracy\_Assessment:  
 Attribute\_Accuracy\_Explanation: 3x3 factorial split plot design, main plot; fertilizer application (number of night for corralling with or without inorganic fertilizer), sub plot; supplement for livestock (0 g day<sup>-1</sup>, 360 g day<sup>-1</sup>, 720 g day<sup>-1</sup> of millet bran)  
 Lineage:  
 Source\_Information:  
 Source\_Citation:  
 Citation\_Information:  
 Originator: Keiichi Hayashi  
 Publication\_Date: 2005  
 Title: Obtaining quantitative information of IK for evaluation of fertility level in sandy soils in the study site

Series\_Information:  
 Series\_Name: JIRCAS-ICRISAT intermediate evaluation meeting  
 Issue\_Identification: September 12, 2005  
 Publication\_Information:  
 Publication\_Place: Niamey  
 Publisher: JIRCAS

Process\_Step:  
 Process\_Description: Interview of 155 households in three  
 villages of Fakara area (Banizoumbou, Tigo tegui et Kodey) and input  
 the raw data into spreadsheet of Excel and processed them by Excel

Process\_Date: Unknown

Spatial\_Data\_Organization\_Information:  
 Direct\_Spatial\_Reference\_Method: Point  
 Point\_and\_Vector\_Object\_Information:  
 SDTS\_Terms\_Description:  
 SDTS\_Point\_and\_Vector\_Object\_Type: Area point

Entity\_and\_Attribute\_Information:  
 Detailed\_Description:  
 Entity\_Type:  
 Entity\_Type\_Label: Yield and biomass production for cropping 2003  
 (KA1, KA2, KA4, GY5)  
 Attribute:  
 Attribute\_Label: OID  
 Attribute\_Definition: Internal feature number.  
 Attribute\_Definition\_Source: ESRI  
 Attribute:  
 Attribute\_Label: CHAMP  
 Attribute\_Definition: Code of Field  
 Attribute\_Definition\_Source: Keiichi Hayashi  
 Attribute:  
 Attribute\_Label: PLOT  
 Attribute\_Definition: Name of Plot  
 Attribute\_Definition\_Source: Keiichi Hayashi  
 Attribute:  
 Attribute\_Label: LEAVE\_FRES  
 Attribute\_Definition: fresh weight of leaves  
 Attribute\_Definition\_Source: Keiichi Hayashi  
 Attribute:  
 Attribute\_Label: LEAVE\_DRIE  
 Attribute\_Definition: Dry weight of leaves  
 Attribute\_Definition\_Source: Keiichi Hayashi  
 Attribute:  
 Attribute\_Label: GRAIN  
 Attribute\_Definition: Weight of grain  
 Attribute\_Definition\_Source: Keiichi Hayashi  
 Attribute:  
 Attribute\_Label: STEM  
 Attribute\_Definition: weight of stem  
 Attribute\_Definition\_Source: Keiichi Hayashi  
 Attribute:  
 Attribute\_Label: NO.\_OF\_HIL  
 Attribute\_Definition: number of hill  
 Attribute\_Definition\_Source: Keiichi Hayashi

Distribution\_Information:  
 Distributor:  
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Contact\_Instructions: http://www.jircas.affrc.go.jp  
Resource\_Description: Yield and biomass production for cropping 2003 (KA1, KA2, KA4, GY5)  
Distribution\_Liability: Users who need the data should explore the metadata files and should contact JIRCAS via his physical or mailing address  
Metadata\_Reference\_Information:  
Metadata\_Date: 20061211  
Metadata\_Contact:  
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Contact\_Person\_Primary:  
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Metadata\_Standard\_Name: FGDC Content Standard for Digital Geospatial Metadata  
Metadata\_Standard\_Version: FGDC-STD-001-1998  
Metadata\_Time\_Convention: local time  
Metadata\_Access\_Constraints: Metadata available on Icrisat server until the final decision of the project about data and their metadata  
Metadata\_Security\_Information:  
Metadata\_Security\_Classification: Unclassified